

CLAIMS

What is claimed is:

1. A vehicle insert part system, comprising:
a vehicle body wall having an opening and a marginal portion; and
an insert part including:
 - (a) a neck adapted to pass through the opening; and
 - (b) a flange arranged on the neck having an underside facing the neck, the flange operable to cover the marginal portion of the wall adjacent the opening, the flange further including:
 - (i) a depression on the under side, bounded on an outside by an elevated circumferential edge;
 - (ii) a plastic body arranged in the depression, the plastic body capable of being brought into a flowable state; and
 - (iii) a retainer operable to secure the insert part in the opening of the wall;

wherein the plastic body is completely accommodated within the depression, and in an installation position having the insert part secured in the opening of the wall by the retainer, the circumferential edge is operably pressed into contact with the wall.

2. The insert part system of claim 1, wherein the flange comprises a surface of contact operatively formed by the circumferential edge, the flange being operatively deformable transverse to the surface of contact.

3. The insert part system of claim 1, comprising an arrangement of the retainer operable to secure the insert part in the opening of the wall, wherein in the installation position of the insert part, the flange bearing on the wall with the circumferential edge is elastically deformed.

4. The insert part system of claim 1, wherein the retainer comprises a plurality of spring elements which, in the installation position, operatively generate a force pressing the circumferential edge of the flange into contact.

5. The insert part system of claim 1, comprising at least two spring catches each having an entry incline and a bearing surface, the entry incline operatively compressing the catches upon insertion in the opening, and the bearing surface operatively bearing on the wall on a wall side opposite to the flange after a retro-deformation of the catches.

6. The insert part system of claim 5, comprising an elastically deformable wall segment of the neck having the catches integrated into.

7. The insert part system of claim 5, comprising a plurality of rib-like projections located on an outside of the neck, each equidistant from the flange, which upon insertion of the insert part are operatively thrust through the opening of the wall.

8. The insert part system of claim 7, wherein the projections comprise:
a plurality of lead-in inclines facing away from the flange; and
a plurality of boundary surfaces facing the flange, the boundary surfaces lying in a plane of the bearing surfaces of the catches.

9. The insert part system of claim 1, comprising:
a shank extending the neck away from the flange; and
a bore formable through both the neck and the flange operable to accommodate a fastening element.

10. The insert part system of claim 9, comprising a closed, free end of the shank.

11. The insert part system of claim 1, wherein the neck comprises a cross-sectional contour having a polygon shape.

12. The insert part system of claim 1, wherein the neck comprises:
 - a square cross-sectional contour forming a plurality of walls;
 - a plurality of catches projecting outward from an opposed two of the walls;
 - a plurality of recesses extending in a lengthwise direction; and
 - each wall having the catches being subdivided by the recesses into an outer, springing wall segment and an inner wall segment.
13. The insert part system of claim 12, comprising:
 - each inner wall segment operably forms one of a plurality of spring tongues extending in a lengthwise direction of the bore; and
 - a radial slot opening into each of the recesses operatively laterally freeing each of the spring tongues.
14. The insert part system of claim 12, wherein the plurality of walls includes walls lacking the catches, each of the walls lacking the catches comprising a rigid wall.

15. A fastening element adapted for insertion in a rectangular opening in a vehicle body wall, the element comprising:
- a neck adapted to pass through the opening;
 - a cross-sectional contour of the neck having a rectangle shape and four sides;
 - a flange arranged on the neck covering the marginal portion of the wall around the opening when the fastening element is arranged in the opening, the flange having a bore extending through the flange into the neck operable to accommodate a screw; and
 - an outward-projecting spring catch arranged on each of an opposed pair of the four sides of the neck operable to secure the fastening element in the opening of the wall;
- wherein each catch is integrated in an elastically deformable wall segment of the neck, each elastically deformable wall segment being connectable to a rigid wall segment lacking the catch.

16. The fastening element according to claim 15, wherein the elastically deformable wall segments integrating the catches include recesses extending in a bore lengthwise direction, the recesses subdividing each elastically deformable wall segment into an outer spring wall segment and an inner wall segment.

17. The fastening element according to claim 16, wherein each inner wall segment comprises a spring tongue extending in the bore lengthwise direction and laterally relieved by a radial slit opening into each recess.

18. The fastening element according to claim 15, wherein each spring catch comprises an entry incline and a bearing surface, the entry incline serving to compress the catch upon insertion in the rectangular opening, and the bearing surface, after retro-deformation of the catch, operably bears against the vehicle body wall.

19. The fastening element according to claim 18, comprising a circumferential edge of the flange, the edge being elastically deformable transverse to the bearing surface.

20. The fastening element according to claim 19, comprising a retainer for securing the fastening element in the opening of the vehicle body wall wherein in an installation position of the fastening element, the flange operably bears on the vehicle body wall about the elastically deformable circumferential edge.

21. The fastening element according to claim 15, comprising a shank extending the neck away from the flange, wherein the bore cooperatively extends into the shank to operatively accommodate the screw.

22. The fastening element according to claim 21, comprising a closed, free end of the shank.

23. An insert part, comprising:

a neck;

a flange arranged on the neck having an underside facing the neck, the flange further including:

(i) a depression on the under side, bounded on an outside by an elevated circumferential edge;

(ii) a plastic body arranged in the depression, the plastic body capable of being brought into a flowable state; and

(iii) a retainer;

wherein the plastic body is completely accommodated within the depression, and the circumferential edge is elastically deformable, such that in an installation position the insert part is operably securable against the retainer by elastic deformation of the circumferential edge and the plastic body being brought into the flowable state.